## Ozone In the Uinta Basin

Modern ozone monitoring in the Uinta Basin of Utah and Colorado began in 2007 with summertime only monitoring by the National Park Service using a non-EPA approved method at the Dinosaur National Monument west entrance in 2007. Year-round non-regulatory industrial ozone monitoring in response to EPA enforcement actions began in Uintah County in 2009. Tribal monitoring began in 2011. Both the tribal and the industrial monitors have gone through periods of non-regulatory data collection and regulatory data collection. Utah DEQ began monitoring at a remote high elevation site (not subject to elevated ozone) in 2011, and at ozone impacted sites in 2012.

Regulatory actions will necessarily have to be based on regulatory data. Data from the highest ozone site in the Uinta Basin (the Ouray site, operated by industry from 2009 to 2014, and operated by the Ute Indian Tribe of the Uintah and Ouray Reservation in 2015 and 2016) has non-regulatory data in 2009-2012, regulatory data for 2015 and 2016, and periods of both regulatory and non-regulatory data collection in 2013 and 2014. Significantly, the first 3 months of 2013, when 39 days of ozone above the 2015 NAAQS level were recorded, were non-regulatory. Thus regulatory design values for 2013-2015 are lower than the design values that would be seen if both regulatory and non-regulatory data were used for design value calculation.

Table 1, below, shows the annual highest 4<sup>th</sup> maximum 8-hour ozone recorded in the Uinta Basin for 2009-2016, using all data and using only regulatory data.

Table 1 Uinta Basin Winter Ozone, All Regulatory and Non-Regulatory Data

Year	Basin Highest	Basin Highest	All Data	Regulatory
	4 <sup>th</sup> Maximum	Regulatory 4 <sup>th</sup>	Design Value	Design Value
		Maximum	_	_
2009	67	NA	NA	NA
2010	117	NA	NA	NA
2011	116	NA	100	NA
2012	70	NA	101/	NA
2013	132	92	106	NA
2014	79	79	93	NA
2015	68	68	93	79
2016	96	96	81	81

Table 2 compares the Uinta Basin combined regulatory and non-regulatory data with the highest annual data from the combined Orange, Los Angeles, Riverside and San Bernardino county data sets. The Uinta Basin highest 4<sup>th</sup> maximum is higher than the Los Angeles area 4<sup>th</sup> maximum in three of the last 8 years. Uinta Basin ozone is second only to Los Angeles in all U. S. data.

Table 2 Comparison of Highest Uinta Basin and LA Basin Ozone, 2009-2016

Year	Uinta Basin	Uinta Basin	South Coast	South Coast
	Highest 4 <sup>th</sup>	Design Value	Highest 4 <sup>th</sup>	Design Value
	Maximum		Maximum	
2009	67	NA	108	118
2010	117	NA	109	112
2011	116	100	113	107
2012	70	101	106	106
2013	132	106	104	107
2014	79	93	102	101
2015	68	93	107	102
2016	96	81	117	108